

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: Brian Summers <bsummers@dragon.achilles.net>
Subject: BC-348 Help Need SOLVED!
Message-ID: <m0u3AAw-000611C@dragon.achilles.net>

Hi folks:

Pleased to report that the problem of the poor CW audio, "jitter" when viewed on the scope, has finally been solved. Thanks to Bob/NA4G who put me on to cleaning the grounding wipers on the tuning cap, as well as possible problems with the cap bearings.

Turns out that I had more than one problem. Several squirts of contact cleaner were used on the cap grounding wipers, and I also tightened up the bearings just a few degrees. This cleared most of the problem. A replacement osc tube 6C5 cleared the rest. As it happens I have a few 6C5s on hand, and two of them exhibited the same symptom. Replacing the 6C5 alone did not do much. It was the combination tube/cap cleaning that was needed. I'll see how things go the next little while. If the problem reappears I'll remove the cap and take it into work and see if I can have it dunked in the ultrasonic cleaner.

Whilst going through this exercise I uncovered two other defective tubes. An occasional B+ short to ground caused by a intermittent RF amp VT-86/6k7. Also, the receiver would sometimes take a long time before it would come to life; often requiring several operations of the bandchange switch or the AVC-OFF-MVC switch. This turned out to be an intermittent VT-93/6B8. Uncovered by serendipity when I was troubleshooting that part of the circuit. 50 year old hollow state devices cannot be taken for granted.....

Thanks to all who contributed, provided advice, support and encouragement. I hope I can do the same for other boatanchorites. The list may not be complete (my apologies if you've been overlooked), but I have notes from the following: Bob/NA4G, Bob/K9EUI, Jay/KE6PPF, Ken Corwin, Greg/KX4R, Steve/N4LQ, Dave/AB5S/7, Terry/KJ7F, Dave/GM3WKB, Jim/WL7CMQ

Thanks again all.

73, Brian VE3JKZ

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Al Klase <alklase@postoffice.ptd.net>
Subject: Re: Breting 12
Message-ID: <199603312000.PAA23531@ns1.ptd.net>

>
>Purchased a unique receiver last night...a Breting 12! Made in Los Angeles in
>1936. Got it from the original owner. Haven't fired it up yet, but the Old
>Timer said it worked when he put it away 30 years ago! (tisk, tisk). Anyone
>know about this thing?

> Tom WC9M Moline, IL tl39597@deere.com
>

There's a short write up on Breting including the Model 12 in Moore's "Communication Receivers". They were manufactured by Gilfillan Bros. in LA who also built the Patterson communications receivers. The schematic and alignment instructions are hidden in the back of Riders Volume VI, page misc. 6-5.

From the schematic, this appears to be a reasonably sophisticated RX: Two RF stages on 20 meters, crystal filter, 2 IF's, R-meter (signal strength), and "V.I. Meter" which apparently reads modulation percentage. Also has extra switchable sections in the main tuning condensor, so they can tune the broadcast band in on range and still have a reasonable tuning rate on short wave. I assume the band spread is mechanical.

I bet I'd replace all the paper and electrolytic caps before etting it near an outlet.

73,

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: lkayser@WorldLink.ca (Larry Kayser)
Subject: Broadcast Engineering Question
Message-ID: <9603311612.AA08468@beacon.WorldLink.ca>

>We have a local station about 15 miles away, 1000 W on 960 kcs. On my R-725
>with a 40 meter long wire, it comes in at 75 dB on the carrier level meter,
>but it also comes in at 40 dB on 1075 kcs. (confession, same signal
>received on the R-71A).

Phoning the DJ doesn't seem to be relevant.

Someone else has spoken to you about the IF, images etc.

Next, you move to a portable radio and go a mile or so in each direction, you can easily have a local oscillator that is mixing with the 960 to produce 1075. A strong local signal on 2035 could produce the signal on 1075 etc. You might also have to beware of using a vehicle as the moveable rx, I found the oscillator in the digital clock nearly drove me nuts once, I was in the middle of nowhere and I had a strong hash and spurious beeps all over the place, till I yanked the dam battery out of the car.

So you are one of the lucky ones, you find that the signal persists on 1075,

it still may well not be coming from the transmitter and the transmitter owner has no obligation to do anything about it!

Next you have to find an external source that is mixing with the station. A good place to look for awful garbage quality, terrible engineering, and just plain awful performance is your friendly local cable tv company. They are the best free source of RF garbage created by man, before computers, and they normally are the hardest to convince that they have a problem. Trace back on the number of FCC Administrative procedures against this group. So if your tracking make sure these guys are not part of the problem, go 15 miles in the other direction and see if the 1075 still exists....

If all else fails, take a hard look at other transmitters. Check for transmitter re radiation of a low frequency beacon, connected with an airport, those old ancient transmitters had little or no design intent for re-radiation of signals.

For instance, if you had a low frequency beacon on 230 KC I would be looking very hard at BOTH the BC and the Beacon transmitter. Getting the beacon off the air for a test might have to wait until it is taken off for maintenance, a NOTAM, Notice TO AirMan is required, last time I checked, you should be able to negotiate for notification of the event.

Take a hard look at other re-radiation issues for other broadcast stations, have you got one on 1190 kc, or one on 730 kc? This is fun stuff.....

I once chased a reradiation problem on the broadcast band hundreds of miles, nearly drove me nuts until I realized I was always near a railroad track, sure enough found the transmitter was very nicely bonded to the railroad track way back in the 1930's, a great way to improve the coverage!

Please also remember, for some reason I do not understand, Transmitter reradiation, complete with free mixing, does not always transfer the modulation. You can have neither, both, or either modulation on the spurious. This I have never understood.

I do note that 1075-960 is 115 Kc, which is nicely 1/4 of 455 kc with a tiny delta. More hard looking required.....

good luck

Larry
va3lk / wa3zia

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: n5off@w5ddl.aara.org

Subject: Broadcast Engr Data III
Message-ID: <336464@w5ddl.aara.org>

Well, after sorting through the flurry of replies on this (some nice, some nasty) I have examined my equipment here. Found nothing obviously wrong that would cause me to hear KROF 960 AM at 1075 Kcs.

I've heard this signal with three ants on radios with 455 and 500 Kcs IF's.

Today, I drove 10 miles down the road to within sight (about 3 miles) of the station's tower. I had with me an analog AM/FM Walkperson tune box. Guess what . .KROF Lima Charlie on 960 and again a little further down the analog dial, possibly 1075.

I tuned it in on the car radio as best I could, again LC on 960 and 1070 and 1080. Nowhere else.

So I have reached the following conclusions:

Its not intermod with other locals.
Its not my (three) ants.
Its not my Al house wiring (its Cu).
Its not my poorly designed radios (by Collins :-)

Doggonnit, I believe the station is slinging out signal at 1075 Kcs, about 15xxx watts according to my measurements.

More debate to follow I'm sure . . .what can I suggest to the station (should I even call them?).

73 de tom n5off

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: aa4rm%amos.UUCP@mathcs.emory.edu (Marty)
Subject: Buletin, Buletin - Columbus Hamfest
Message-ID: <9603310335.AA01143@amos.YP.mystnite>

This is the granddaddy of boatanchor haunts since it's next to the Confederate Naval Museum which houses the remains of the river gunboats Chattahoochee & Alabama.

Amazing sights to review - 200' long flatboats driven by twin screws & buit up there in W. Ga.... engine castings done outdoors next to open hearth furnaces in area of Birmingham.

Hamfest in former Confederate Ironworks that's been beautifully

adapted as a convention center. Overhead line shafts & benches built with bearing pillow-block side braces make a spectacular effect.

The sights go on and on.

My presence was necessitated because of a meeting mit ARRL officials 'cause I'm the chm'n of the June 8/9 Atlanta event. It's their state convention. Told 'em if their complementary booth hasn't sufficient staff, we'll exhibit manequins wearing ARRL-embroidered negligees!

One of them thinks this'll start a membership boom. Huh, showed me.

There was good BA stuff - whew, u tho I'd never get there.

GSB100 went begging with manual for \$75 ask

R388 (no tag \$200) & DX100 (offers) & SX28 (offers too)

-pkg went with 6' relay rack for \$175

HQ170 mit 2m & manual. Clean resto, ask \$175, sold \$150.

Zenith stylish 7-pin mini AA5 table radio. \$7.50 ask, sell \$5 (2 ME)

Lotta parts, Kenwoods, etc.

Spotted BA-mavens were KB4J, NE4S, W4CFF, WA4SQR, K4PH0, Chuck Nobes

Smallish fest but super congenial. Tailgating in the spectacular center was an afterthought. The fest was quite big years back when tailgating was embraced.

Atlanta will tailgate in a parking deck this year after 14 years of treating our favorite pursuit as a stepchild! Back to our roots.

But we're in a historic site too. SE-regional Sears downtown retail/whse. Built 1927. A Wouff Hong ceremony dream site come true

Come see us, heah?

Marty

web site: <http://www.events2000.com/archamfest.html>

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
Subject: DX60A w/VFO FS

I am posting this for a friend w/o Net access. Email replies to me, he will contact you on his Quarter. (Be sure to include phone ### and good time to call)

Heathkit DX60A with HG10A (?) remote VFO, crystalled up, in very nice condition, looks pretty. Price negotiable.

Interested parties reply via email.

----- Forwarded message ends here -----

Dick Dillman
WPE2VT N6VS ex-WA2BJK
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Paul Thekan <Paul.Thekan@pgtp.varian.com>
Subject: EIMAC update
Message-ID: <2.2.16.19960331120053.2bef9d10@pgtp.varian.com>

Good Grief!! I've been deluged with mail over my posting of the Eimac binders and mostly about the stuff in the penthouse storage. I cannot answer all of you individually so I will make this general post to all.

The tubes and documentation are going to the Perham group. I'am sorry to all the collectors and other firebottle museums out there who would also like some of this stuff. I too would like to see it spread around for all to enjoy but there is darn little if anything left of the old Eimac that has not already been thrown out in past purges . We, the few hams left, are trying to save what little of the old stuff is left to save. While it is true the Perham foundation does not have a museum to display their collection at this time, there are plans afoot to have a new building built to display all of their collection. We believe the Perham group is a worthy place to entrust these items. Their collection is being housed in 20 ft cargo containers currently , about 40 of them. We would like to keep some of EIMACS history here in the bay area for others to see. I wish all those trying to locate Eimac tubes the very best luck , as I think there is a lot

of it out there in garages and attics still.

A group of us will be going through the boxes in the next several days. We do not know exactly what's all there and won't till we start digging . The few boxes I opened up could be all that's worth saving and the rest yearly accounting files or old purchase requisitions. So hang tight.....anything worth saving will be saved and someday soon put on display for all of us to enjoy

Thanks for your concern

Paul N6FEG

PS I came across , several months ago, a negative of a film made of the old EIMAC plant in San Bruno back in the early 1950s. It was produced by a local TV station of the time that ran a series of shows that high lighted local industry. I think it's about 40 minutes long. Don't know what exactly is on it but it would'nt take a rocket scientist to figure that it would'nt be about how firbottles are built. If and when we can get it transfered to a video format I will let the group know.

Paul Thekan - Speaking for Himself
Paul.Thekan@pgtp.varian.com

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: Paul Thekan <Paul.Thekan@pgtp.varian.com>
Subject: FREE EIMAC Binders
Message-ID: <2.2.16.19960330150442.3f7f7c7c@pgtp.varian.com>

Have the unfortunate pleasure of cleaning out what's left of the old R&D lab here at Eimac. We are moving the old lab to another spot here in the plant and where told to get rid of the old stuff , its really breaking my heart and goes against my belief in not throwing anything away because you will no doubt need it later. Bill and Jack no longer run the show so out most of it goes. This really pains me to no end.

Anyway , sorry got off the main subject here and that being I've saved quite a few 3 ring binders , 1 1/2" , 2" and 3". If any of the locals here want them , let me know and I will bring the pile to either Livermore and / or Foothill this April

Thanks for listening

Paul N6FEG

PS NO , I did not throw any tubes away and in a couple of weeks the Perham foundation will get a truck load of tubes to take for the museum. They where stored up in a penthouse storage building here at the plant. There where boxes and boxes of ancient firebottles laying in repose with a thick layer of dust on the boxes. It was like entering TUTS tomb for the first time. No one had been in there for a generation . Found the original 304 and 100TH . These where used for the patent models. There are even picture tubes that we made back in the 50s up there. And all the original engineering note books are up there too. Any way I better get back to work , sniff , sniff.

Paul Thekan - Speaking for Himself
Paul.Thekan@pgtp.varian.com

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
Subject: FS: Johnson Thunderbolt HF Amp

Thought this one was sold but has been three weeks and no check.

Johnson Thunderbolt HF amplifier. This unit requires about 20 watts to drive to 1200 watts. The unit is in fair to good condition but I have not fired it up so operationally you should assume it needs work. Uses all tubes (rectifiers, voltage regulators and 4-400As (X2) in finals).

Mail room says they will pack it for \$45.00 and shipping should run about \$100 +/- . I want \$500 obo (total ~\$645.00). I can send images of the amp to those who request so you can verify the condition of the unit. Thanks for your interest. 73 de John

--

John Wilcox / NS1Z (Rumford, Maine)
INTERNET :204.117.6.48
 ns1z@agate.net
Work :5018901@mcimail.com
TCP/IP :44.118.6.4
 ns1z@ns1z.ampr.org
AX-25 :ns1z@kb1bsc.fn44rn.me.usa.noam

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Dick Dillman
WPE2VT N6VS ex-WA2BJK

<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: "basalop" <basalop@eskimo.com>
Subject: Re: FS: Swan, Heath, National, tube tester
Message-ID: <199603311737.JAA20736@mail.eskimo.com>

Hi Gang,

I visited my brother who is collecting up goodies for his club to sell at the swap meet in Seaside ,Oregon this coming June. I thought I would mention them here. I looked at this stuff and none of it is in bad shape at all. In fact it is pretty nice.

Swan 500 with the 117XC external power supply, a box called 510X which appears to be a control box for selecting either xtals or and external VFO. This thing is in very good looking shape except I noticed some slight paint wear around the RF/AF gain control on the lower left side of the front panel. Has manuals.

Heathkit HW12-A. This thing looks in good condition with it's fine dirt coating. Would include the HP-23 power supply and manual.

National NC-140. This unit is very clean. I did not notice any marks on it at all. It works and was running at the time making fine copy of the local AM station. Manual also I think.

Precision Model 10-40 tube tester. This thing looks complete with several books and manuals. The case is scuffed up and looks like all but one of the panel screws is gone. Thing probably works just fine but you can tell it has been used.

Now if anyone is interested in talking to my brother about any of this stuff give him a call on the phone. He is the owner/operator of a sewing machine and vacuum cleaner store. He has no problem with shipping at all and can even deal with bank cards. I was not of much help when he asked me what any of these things were worth. I was only able to give him a very rough idea so her is your chance to wheel and deal. The gear was donated and the money will go to the club fund for upgrading their emergency communications.

Contact John Berry at 503-842-8043
Tillamook Sewing Sale and Service (or something like that)

73 Jim K7SLI (basalop@eskimo.com)

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: "Lahlum Ross" <ross_lahlum@msmail.wes.mot.com>
Subject: FW: Variac Marked "350 cycles min"
Message-ID: <9603311412.AA00504@kay.wes.mot.com>

From: Lahlum Ross on Sun, Mar 31, 1996 8:00 AM
Subject: RE: Variac Marked "350 cycles min"

I believe the reason they chose 400 Hz was because the magnetics could be lighter than if they were @ 60 Hz. Higher freq than 400 Hz were considered pretty tricky in thoses days. In fact, I used to work on a mag tape drive that had a 400 Hz switcher in it. When I asked the designer why we couldn't go with a higher frequency to save weight & cost, he balked at the risk of going beyond the tried & true 400 cycles. One side benefit we had by using 400 Hz xfms was that nobody would steal the power transformers to make home stereo power amps. One cognitively challenged tech tried it & the thing smoked on him (ha!)

Ross/KB9JJR

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: jproc@worldlinx.com
Subject: RE: FW: Variac Marked "350 cycles min"
Message-ID: <Chameleon.4.01.2.960331105306.jproc@>

The rule for power transformers is : you can go up in frequency but not down.

A transformer running at design frequency produces a specific amount of inductive reactance and this limits the amount of current flowing in the primary. If you lower the frequency, the reactance is also lowered and the current increases thus overheating the core. The only to fix the problem is to add more iron to the core which would of course, would be impractical.

That's why 25 cycle radios work on 60 cycles but not the other way around. Devices such as motors must be operated at the design frequency otherwise the will rotate at the wrong frequency and/or overheat. Back in the 1950's, I remember the Hydro company coming around to replace all the fractional

horsepower motors when we were converting from 25 to 60 Hhz power.

In 1982, I remember the warning from IBM concerning high res monochrome and colour monitors. The colour monitors used the standard scan rate of 15.75 Khz. The high res monitors used a 17 Khz scan rate. If the high res monitor was attached to a colour adapter, it would only be a question of time before the horizontal output transformer started to smoke.

Any device that uses the line frequency to derive timing will also operate incorrectly. I remember some of our DEC PDP11 computers with 60 Hz power computers being shipped to England years ago. I don't know if their power supplies ran hotter, but we certainly noticed that each 'minute' was only 50 seconds long :-)

I thought the last two examples would be complimentary to the thread.

Regards,

~~~~~  
Jerry Proc VE3FAB  
E-mail: jproc@worldlinux.com  
Radio Restoration Volunteer  
HMCS Haida, Toronto Ontario  
~~~~~

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Fwd: DX60A w/VFO FS
Message-ID: <73032.ddillman@igc.apc.org>

NOTE The message below is a re-post from rec.radio.swap. Replies must go to the person making the post, not me.

----- Forwarded message begins here -----

From: robbin decker <kb2rmi@pop3.frontiernet.com >
Newsgroups: usenet.rec.radio.swap
From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Fwd: FS: Johnson Thunderbolt HF Amp
Message-ID: <73037.ddillman@igc.apc.org>

NOTE The message below is a re-post from rec.radio.swap. All replies must go to the person making the post, not me.

----- Forwarded message begins here -----

From: John Wilcox/NS1Z <ns1z@agate.net>
Newsgroups: usenet.rec.radio.swap
From: boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: n6nae@ix.netcom.com (Richard Humphrey)
Subject: RE: Garage radios
Message-ID: <199603310525.VAA25863@dfw-ix4.ix.netcom.com>

Mine is a National NC-173. I figure it's so ugly, it can live with my truck and the radio junk. It may also be possessed, so I keep it away from the good radio gear which lives in the house. Possessed? You tell me: I pulled it out of the cabinet to do some cleanup. While it was sitting on the bench, the chassis spontaneously fell over all by itself, putting a dent in the transformer case. Nuts. Then when I went to put it back together, it wouldn't fit back in the cabinet. Must have fussed for two or three evenings. I could line up the brackets which hold the chassis to the case, but then the controls wouldn't go through the holes in front. If I got the controls through first, then the brackets wouldn't fit. Bizarre! I finally used a little brute force and got it together, but it was making me crazy. Then I go to put the lid back on, and a black widow spider comes crawling out. Was this radio owned by Stephen King, or maybe Hitchcock? It stays in the garage!

Richard
n6nae@ix.netcom.com

From: boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: don merz <71333.144@compuserve.com>
Subject: Gear, Lit FS/FT, Info Needed
Message-ID: <960331013454_71333.144_DHB58-1@CompuServe.COM>

For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
71333.144@compuserve.com

Eico 720 transmitter, 90 watts CW only, some chips at edges and one scratch. But it loooks very good or better. Complete. Unmodified. Untested. \$90
Eico 730 AM modulator. Mate for the 720 above. Looks excellent. Complete. Unmodified. Untested. \$70. Not sold until I see if 720 buyer wants it.
Hallicrafters R-44 speaker. Mtaches SX-43 and others. Excellent or better original condition. \$60
HRO 60 D coil, 1.7-4.0mc general coverage and 3.5-4.0mc bandspread

(switchable). I scratch on face. \$40
HRO 60 wooden coil case for 3 coil sets. Good condition. \$30
Military J-37 key with leg clamp. Like new. \$15
Military Radio Compass aircraft instrument readout. Black wrinkle case with 5" dial 0-360 degrees. No other markings except orange Signal Corps stamp. Probably WWII vintage. \$20
Military RBJ coils sets. The RBJ was a wartime version of the National HRO. These coil sets E, F, G, H, and J are tagged "CNA-46165, Unit Of Model RBJ, 8/20/41." So these look like pre-war HRO coils. with black calibration charts, handles and black wrinkle finish. I could use the H and J sets on my pre-war HRO But I'd rather see a real RBJ owner who needs the coils get the entire set. If you can use any one or all of these for either your RBJ or civilian HRO, let me know. If no RBJ owners step forward then we'll distribute these among the pre-war HRO owners. I guess I'll take offers since I have no idea what they are worth.
National HRO coil sets. These are the standard A, B, C, and D coil sets for the pre-war HRO with black calibration charts and black wrinkle finish. They are all in nice shape except the B coil's handles have been rudely hacksawed off. Sell the whole set or individual coils. Let me know what you need and make an offer.
Electronic Eye Equipment Company code trainer set. Beautiful black wrinkle on bakelite base with neat sideswiper key under a clear plastic cover at one end and a doghouse-style enclosure for the electronics at the other end. Runs on 110VAC. Super! \$79

Literature

1947 Radio Handbook. Very good hardback. 8-1/2" x 11" format. Great ads! \$22
1929 ARRL Handbook, 5th printing. The cover is loose but this is in nice shape overall. \$50 Trade for 1937 or 1941 ARRL Handbooks.
ARRL Radio Amateur's VHF Manual, 1965, 1st edition, good: \$11
ARRL Radio Amateur's License Manual, 1937, 8th ed. Very Good. \$14
Popular Science Everybody's Radio Manual, 1946, excellent hardback: \$18
Stancor Hamannual, 1939, 4th ed, excellent: \$29
Radio I and Radio II, Training For Victory, written by Westinghouse engineers for American Book Company, 1943. Engraved covers show a GI using a BC-611. Photos depict SCR-300 and other military sets. Text is basic electronics Extremely nice wartime "preinduction training" manuals. Hardbacks. \$33/2 volumes.
Burnstein Applebee 1941 Catalog, Cover a bit raggedy: \$18
Burnstein Applebee 1942 Catalog, Cover loose but otherwise excellent: \$22

Military Literature

NAVSHIPS 900,016, Radar Electronics Fundamentals, 1944. Good condition but binding edge shows its age. \$19
NAVPERS 10188, Electronics Technician 3 Training Manual, 1954, excellent: \$18
TM 11-458 Common Battery Telephone Equipment, 1942, excellent: \$14

TM 11-862 SCR-504A Radio Direction Finder, 1943. Binding edge going bad: \$19
TM 1-470 Aircraft Radio Shop Practice, 1942. Weathered aging look to covers but basically excellent: \$19

For Trade

Vibroplex Zepher bug s/n 180943, no patents listed, 833 Broadway NYC tag.
Excellent condition.
HRO 60 E coil, 900kc - 2050kc. Excellent condition.
HRO 60 F coil, 480kc - 960kc. Excellent condition.

Information Wanted

Why was the military MX-2840/URR "Audio Frequency Detector" made? I came across several of these and the manual says that it was designed to take the 455kc IF output from the back of the R390A and provide an outboard audio stage. This thing is rackmount, solid state styled to match the R390A. The manual is marked "National Security Agency, Fort George G, Meade, MD, October, 1962." What good is this? Notes in the manual seem to indicate that only 39 were made.

Anyone recognize a G01688 tube? It is blue metal UHF with cooling fins on top and octal base on bottom. Two BNC connectors go into it's innards around the midsection and a big square waveguide with a round flange comes out sideways near the top. About 10" tall and weighs 3 pounds.

Information Wanted on a Meissner 17 tube shortwave receiver. I picked up this radio as a chassis only. It needs work but there are no identifying marks on it to tell me what it is. So I need to identify it and locate service info on it. The chassis is chrome, it has 17 tubes, an s-meter and separate but overlapping round tuning and bandspread dials. The main tuning dial has a slotted window disk that covers bands not in use. The output stage is push-pull 42s. Can anyone use these meager clues to identify this radio? Any help appreciated.

--

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Bob Duckworth <rmd@ka4ybr.ka4ybr.atlanta.com>
Subject: Hallicrafters iron ID please.
Message-ID: <199603312249.RAA13109@ka4ybr.ka4ybr.atlanta.com>

> Warning!
>
> Stop now if you don't want to read a long description
> of some old unknown to me Hallicrafters iron.
>

> -----
>
>
> O.K. Hallicrafters guys, what's this and when was it built?
>
> The only indications that it is Hallicrafters are the 'h' knobs
> and the 'hallicrafters' ceramic coil form.
>
> It's a TX/RX. TX is a 6L6 and a pair of 807s.
> TX has sockets for 6 FT171 xtals.
> Big ceramic coil has 2 sets of 6 moveable taps.
> Bigger ceramic form coil is behind a front panel door
> marked 'antenna loading' and has 6 moveable taps. (EKLA)
>
> Below this door is a 6 position switch marked 'operating channel'
> To the right of this switch are 6 holes behind which live six
> caps labelled PA PLATE TUNING. (slots horizontal at mid capacity).
>
> Above these is a knob marked antenna tuning.
>
> Above this is a hole where a meter used to live (antenna current).
>
> That's it for the TX half.
>
> The right half of the unit is the RX.
> In the center a indicator marked 1700 to 2700 on one side
> and 2700 to 4400 on the other. There is a pointer one each side of
> this labelled band one (left) and band two (right)
> This 'dial' is driven by a knob at it's edge.
>
> Below this, left to right,
> AF gain, static filter on/off, receiver band switch having
> four positions, crystal 1, manual 1, crystal 2, manual 2
> and to the right of this, a noise control (you'd think these would
> be extremely popular, even now)
>
> RX tube complement,
> 6sj7, 6c5, 6sa7, 6sk7, 6h6 (?), 6sk7, 6k6
>
> This cabinet is approx 18"W x 12 x 12
> and appears to belong clamped atop another unit.
> There are clamps at the corners.
>
> There is a connector on the underside of the chassis in the rear center
> which looks like it might mate to the lower unit or to a cable from
> the lower unit.
>
>

>
> O.K. That's it.
>
> I acquired this BBAB (before boatanchor bug) and tripped over it in the
> basement today while looking for a variable cap for the HW-16 internal VFO
> mod (can't find a 3579.5 around here anywhere).
>
>
> --RAA13095.828312459/ka4ybr.ka4ybr.atlanta.com--
>

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: lkayser@WorldLink.ca (Larry Kayser)
Subject: Heathkit AT-1, Power Output and Manual
Message-ID: <9603311524.AA06766@beacon.WorldLink.ca>

Today I went to the site were my library and ham stuff is stored. Spent three hours digging.

I found my AT-1 Manual. Will the chap who wants a copy of the manual please let me know and I will mail off the copy next week.

The power output of an AT-1 is typically 12 to 15 watts if it is just straight through or doubling (forty meter crystal on twenty), and down to 7 to 9 watts output if it is double double (forty meter rock on 10 meters).

If anyone else needs copies of the AT-1 manual let me know and I will send them off....

Larry
va3lk / wa3zia

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Sandra L Knepper <slkst29+@pitt.edu>
Subject: Re: Heathkit AT-1, Power Output and Manual
Message-ID: <Pine.3.89.9603311116.A12948-0100000@unixs4.cis.pitt.edu>

One of problems with the AT-1 design was no provision for output loading. That is why, Heathkit cam out with a small tuner for the AT-1.

Dave, W3BJZ

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: "Greg Parsons A.K.A. Rat" <gregp@galileo.mis.net>
Subject: Heathkit Model 10-18 O-Scope Manual needed
Message-ID: <1.5.4b12.32.19960331031251.002cd648@galileo.mis.net>

Hi gang,

Well I was walking around the E-Town hamfest today, and what do I see setting under a table? You got it, a Heathkit O-Scope, well I didn't have one, and the price looked good, (\$10) so I bought it, what comments does the group have on this unit? This is the first scope I have had, so any tips? is there a FAQ for scopes somewhere? Did I do good gang?

73,

Greg
KE4000
gregp@mis.net

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: davidh@getnet.com (Dave Hollander)
Subject: Help Needed - NC100A
Message-ID: <v01510100ad84e444449a@[10.0.2.15]>

Despite my message of a couple of weeks ago on my wife disposing of all my stuff, I am not dead yet.

I picked up an NC-100A at the Scottsdale, AZ hamfest a few weeks ago. It was complete except for the bandswitch knob. Despite the dirt, dust and a muddauber's nest, the radio is in good shape and had not been modified. This morning with the help of KE7TV, we fired it up and it plays pretty good all considering it has probably spent years in a barn or a garage. Must be the dry Arizona desert climate!!

I am now looking for a bandswitch knob and a bottom cover. I plan to order a manual.

Can anybody tell me which knob National knob is used for the bandswitch and better yet, does anybody have one they will part with?? Or does anybody have a parts unit? Cabinet fine but the name plates are a bit worn.

One final question...what year was this receiver made? My Raymond receiver bokk is in storage.

Please respond via e-mail and leave me a phone number if you can help.

73,

Dave N7RK
Phoenix, AZ

Dave N7RK - Webmaster CADXA
Phoenix, Arizona *DXCC Honor Roll* *WAZ#23 - 75 Meter SSB*

ex-N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK

davidh@getnet.com	\\-// (o!o)	http://www.getnet.com/~davidh
-----oo00-()-00oo-----		
E-Mail Address		My Home Page

Visit the Central Arizona DX Association Home page ---
<http://www.getnet.com/~davidh/cadxa.html>

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Albert S Woodhull <aswNS@hamp.hampshire.edu>
Subject: HP 417A VHF Detector
Message-ID: <Pine.SUN.3.91.960331132008.5190A-100000@hamp>

I have a Hewlett Packard VHF Detector Model 417A. It is basically a super regenerative receiver that covers 10 to 500 Mhz in 5 bands. It's a pretty useful little gadget for various kinds of VHF experimentation.

I've had this a long time, it used to work 10 years ago or so, then it was in storage. Now it doesn't work. The audio and power supply seem OK, but no position of the quench control produces the expected rushbox noise.

The r.f. circuitry is inside a sealed compartment and there is a warning to read the instructions before removing the detector tube. Unfortunately I don't have a manual for this unit. I would appreciate hearing from anyone who might have a copy of the manual or who knows something about what is inside the sealed compartment.

73, Al N1AW
--

Al Woodhull
awoodhull@hamp.hampshire.edu
n1aw@k1mea.#wma.ma.usa.na
n1aw@ka1jy.ampr.org

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: spr@earthlink.net (Scott Robinson)
Subject: Kid (me!)-built Heathkits
Message-ID: <v01530500ad837fccef0a@[153.37.85.75]>

I still have the first two Heathkits I built (A-7C 7w hi-fi amp and RF signal generator, I forget teh model). Both still work and look reasonable inside. I was about 13-14 when I did this, but still more or less a kid. Some kids solder better than others...and read the manual carefully!

Scott Robinson
spr@earthlink.net

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: aa4rm%amos.UUCP@mathcs.emory.edu (Marty)
Subject: M & H Transmitter, Phila
Message-ID: <9603310418.AA01241@amos.YP.mystnite>

This thing musta been made abt. 1937 with it's 6L6 ab2 mod.s,
808, 802, 6F6 RF deck, 866 p-s, bal-line tuner. It's
in a table-top rack.

Somehow the govt. inspectors missed or skipped it at WW2's start &
it's now in Atlanta.

Any clues??

TIA,

Marty

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Joseph Veras <jveras@wwisp.com>

Subject: Re: M & H Transmitter, Phila
Message-ID: <315F9186.5664@wwisp.com>

Marty wrote:

>
> This thing musta been made abt. 1937 with it's 6L6 ab2 mod.s,
> 808, 802, 6F6 RF deck, 866 p-s, bal-line tuner. It's
> in a table-top rack.
>
> Somehow the govt. inspectors missed or skipped it at WW2's start &
> it's now in Atlanta.
>
> Any clues??
>
> TIA,
>
> Marty

Marty-

The M & H Sporting Goods Company of Philadelphia sold components and also marketed "kits" under its own name during the mid-30's. There is an ad for a M & H transmitter in the December 1936 issue of QST.

If you have such a piece of equipment(or any M&H gear), I would be interested in photographing it. I've been working on a picture book for the past couple of years containing large format photography (no copies from magazine or catalog pages) and am still in pursuit of both an M & H transmitter and receiver to shoot.

The receiver was based on the James Lamb single-signal design detailed in QST articles.

73-

Joe Veras, N4QB

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: n6nae@ix.netcom.com (Richard Humphrey)
Subject: Need any PJ-026 connectors?
Message-ID: <199603310531.VAA17138@dfw-ix7.ix.netcom.com>

Halted Specialties in Sacramento has a box of new, black, PJ-026 connectors. I think these are the stubby style 1/4 inch jacks that are used in headphone extension cords needed for those old air force headphones with the short cord. Anyway, if you need one, you know what it is. Most are still in their original brown tissue wrapping. I

didn't see any matching plugs though.

Halted is at 916 338-2545. The jacks are in aisle 4A, the fourth unit of shelves from the back of the store, down towards the bottom right.

No affiliation with Halted, etc, other than they get my cash once in a while.

Richard
n6nae@ix.netcom.com

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: dgibbs@rational.com
Subject: Need info on Eldico SBA-1 Sideband adapter
Message-ID: <Chameleon.960331112041.dgibbs@>

Greetings again everyone,

At the Timonium, MD hamfest on Saturday 3/30, I purchased an Eldico SBA-1 sideband adapter. Unfortunately, it has no manual or schematic, and the tube sockets are unlabeled!

Does anyone else have a unit like this? I've never seen one before. It is 9-inch rack mount, and the front panel is the same color as an R390A. Unlike a CV-591A, this unit has both a noise limiter and a rejection notch control.

Does anyone have a schematic/manual for this unit? Of course I would pay all costs, etc.

Regards,

Dennis

Name: Dennis Gibbs
E-mail: dgibbs@rational.com
From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: W7FG <w7fg@eigen.net>
Subject: New HomePage
Message-ID: <199604010057.SAA18439@newton.eigen.net>

If any of you have the time, we have a new homepage for the Manual business, etc. etc.

and have the time to look at it, we'd appreciate hearing your Constructive comments. The Photo's are not the best, as we're still fighting the learning curve on Scanning - etc.

We can be found at:<http://eigen.net/w7fg>

There are several (Most) links that dead end at this time, the ones that are working are
Catalog, Who we are, Books.

Thanks for your time. Really enjoying watching the notes from Boatanchors fly by, Please no
50 note days on "Yellowing of Hammarlund S-Meters!!!!!"

73s Gary W7FG

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Sandy Blaize <70401.134@compuserve.com>
Subject: Re: Nike Sites, back then!
Message-ID: <960401021228_70401.134_IHD73-5@CompuServe.COM>

Interesting!

My uncle (now deceased and a silent KEY) was the Supply Officer at Pueblo Ordnance Depot. I remember touring the depot back in the 50's and we visited the Nike Ajax shops. Also the Corporal and the Hawk shops as well. I remember they had a blind guy assembling/rebuilding some kinda hydraulic valves. He could do it faster and with more precision than sighted technicians because of his very acute

sense of feel. Interesting place! I'm sure all the Officers that were ex-WW2 types that

were running things then are probably all dead.

They had an IBM computer that had very large "platter" drives. The platters were

about 10 disks to a unit and about 20-24" in diameter. Kinda like a gigantic hard drive!

They had several of these units. The I/O device was an IBM selectric typewriter.

I think he said they had a 16K RAM and they thought that was large then!

Programs

were done by wiring a "frame" by hand and plugging in the frames into the computer!

"And the whole damned works was run by steam!"...SORRY!....vacuum tubes! It seemed very modern then, but boy what a stone age thing now! Lots of punch tape

too! The "7 level ASCII" stuff. A genuine "BA" computer!

I remember that you could almost feed the pronghorn antelope on the depot, but you couldn't get within a mile of them on the other side of the fence! My uncle said they were a problem, as they would come onto the depot's "igloo" areas in

droves as
soon as the hunting season opened! Who said animals don't know what's going on?
Sometimes I think my parrot and cockatiels are smarter than I am!
73,
Sandy W5TVW
73,
Sandy W5TVW

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: "basalop" <basalop@eskimo.com>
Subject: PE-73
Message-ID: <199603311740.JAA21335@mail.eskimo.com>

Hi Bob,

I was able to pay a visit to the surplus junk stuff store in Portland and took a look at the PE-73. Much to my shock it had been "hammed". I really did not expect a dynamotor to be hacked up but it was.

The brush assembly etc had been removed from one end of the machine and replaced with a pulley wheel. The unit then could be turned by a regular AC motor. I don't have my manual for the BC-375 right here while I am typing this but the mod was made to the end opposite where the power plugs are mounted. Quick look at manual would tell one if the mod was for getting the HV or using the thing for a 28 volt generator. The sockets had been removed, the box containing all the rest of the expected stuff gutted out and a LV meter installed in the lid. With that info you can let me know what you think. I can get it for 20 bucks but not sure it would be worth it. I had great hopes of picking up a good unit for you.

The AC supply for my BC-375 is almost done. I have everything including a variac so I can set the voltage to just where I want it.

To completely change the subject - Do you think there is a TCK out there that needs a home?

73 Jim

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: lkayser@WorldLink.ca (Larry Kayser)
Subject: QCWA Convention, Ottawa, October 4/5

Message-ID: <9603311524.AB06766@beacon.WorldLink.ca>

How many boatanchor people will be coming to Ottawa for the ANNUAL QCWA convention? It would be nice to meet a few of you if your coming. What outings can I arrange for you while your here?

We have an avaiation museum many of which have great boatanchors but side cutters are rather frowned on.....

Are you coming? (or are you just breathing hard?)

Larry
va3lk / wa3zia

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: dgibbs@rational.com
Subject: R-366 receiver?
Message-ID: <Chameleon.960331111706.dgibbs@>

Greetings all,

At the Timonium, MD hamfest on Saturday, 3/30, I came across an interesting receiver. It was an R-366/TRR-5. It had a tag on the front panel, indicating that it was Navy surplus. It was made by Espey Manufacturing Corp. It covered the usual HF bands.

The front panel was unlike any other receiver I've come across, but the inside was remarkably similar to the SP-600. The tube complement was VERY similar to the SP-600, and it was even a rotating turret design, like the SP-600. Even the chassis itself seemed similar to the SP-600.

A friend of mine went ahead and bought this unit for \$200. Does anyone know anything about this receiver? Is it just coincidence that it is like the SP-600, or is there a reason?

Apologies if this receiver has been discussed before.

Regards,

Dennis Gibbs
dgibbs@rational.com

Name: Dennis Gibbs

E-mail: dgibbs@rational.com
From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Ken_Warren@bsd.beavton.k12.or.us (Ken Warren)
Subject: R-460/UR
Message-ID: <1052248.ensmtp@bsd.beavton.k12.or.us>

I have recently acquired a R-460/UR receiver manufactured for the Coast Guard. It appears to be a version of HRO receiver. Does anyone out there have a manual, coil sets, or other info about this unit?

Ken Warren K7RPX

--

--

Beaverton School District
beavton.k12.or.us

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Ken_Warren@bsd.beavton.k12.or.us (Ken Warren)
Subject: R-725/URR
Message-ID: <1052280.ensmtp@bsd.beavton.k12.or.us>

Does anyone out there have any info on an R-725/URR receiver? This is a modification of an R-390. The visual appearance is almost identical to the old R-390.

Ken Warren K7RPX

--

--

Beaverton School District
beavton.k12.or.us

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Jim Dillon <beadgal@ptialaska.net>
Subject: Radios by Hallicrafters Book list
Message-ID: <01BB1EDD.D56396E0@juneau_26.dialups.ptialaska.net>

Hello Skyriders-

So far the following on board for Chuck Dachis new book. It will cost 'yall \$22 via priority mail (both ways publisher-me, me- you, saving 1/3 of the \$33

from others delivered).

Michael Sullivan
Kevin McDonald
Jeff Kilgore
Joe Pinner
Sandy Blaize
Michael Knudsen
Jim Dillon

Anyone else to add (or any of above want off?)? I will need to know today-Sunday 3/31 or early a.m. 4/1 because I'm calling the publisher Monday a.m.

Don't send check until I post re:Radios by H.. again Monday p.m. with mailing address. Thanks

Jim Dillon WL7CMQ beadgal@ptialaska.net
seeking SX-9 thru -14, National black crackle spkr

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: roecker.greg@ist.vf.mmc.com
Subject: Swan 500C choke
Message-ID: <Chameleon.960330180058.greg@bldg27.acc.vf.mmc.com>

Hi to All on the list . . .

I recently purchased a Swan 500C, and just discovered one of the chokes is bad in the RF section . . . it's a 200uH choke, the kind in the ugly green cover . . . sort of looks like a mushroom with leads!!! . . . anyway, I looked through Moser, and Antique Radio, but they dont seem to carry what I need. Does anyone on the list have one of these guys, or can anyone point me in the right direction . . . its got to be rated at least at 275 Volts and at least 150 mils . . .

Thanks, and 73,

Greg Roecker
N4OSJ
roecker.greg@ist.vf.mmc.com
(770.552.0640) Atlanta

Name: greg roecker
E-mail: roecker.greg@ist.vf.mmc.com
From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Rick Blank <rblank@txdirect.net>
Subject: Swan Wattmeter, Collins info, SX-100 report

Message-ID: <1.5.4b12.32.19960401050240.0069eba4@txdirect.net>

Once again, good folks, you are the ones to turn to in my hour of need!

Yesterday I picked up a Swan WM-3000 wattmeter in anticipation of the Swan 600R, 600T, Mk1 setup that I'll pick up in a few weeks, and decided to try it out and see if it worked today.

The meter works in both RMS and SSB modes, but, does not agree with another meter that I have checked against a Bird and is very accurate, therefore, it needs a bit of tweaking! At the 10m end of things, 100watts reads as about 60, at 75m, 100w reads as 120w.

There are numerous trimmer capacitors inside the meter that are not marked and I am hoping that there is someone on the list that has the original paperwork that came with the unit or knows what trimmer affects what so that I can adjust this beauty.

This coming week will also see more info about the Collins knob restoration with the methods and comparisons to originals, it will be my final treatise on the subject and should answer questions for those of us that have wanted to refinish our Collins knobs to look like original. My methods to madness and the easy way out will be explained.

At the Midland Swapfest a couple of weeks ago, I picked up 3 Halicrafters receivers, an SX-100, an SX-110, and an S-38D. The 38D was sold this Saturday and there is some interest in the SX-110, but, the SX-100 is mine!

I took the 100 out of it's case and cleaned the chassis, cleaned the grease and goop out of all the gear-train, washed the knobs, case, meter cover, and the printed brushed chrome face plate. This plate was covered with a clear lacquer that was flaking a bit, so, I carefully started cleaning it off...I ended up using window cleaner, but, the ammonia was a bit strong in it and not only took off the clear lacquer but also faded a small area of the black diamond pattern printing. It still looks pretty good, I just wish that I hadn't faded that black!

As an experiment, I replaced all the standard tube shields with IERC models (except for the rectifier and audio output tube, all tubes have shields) and I am really surprised at how much cooler the IERC tube shields run compared to the stock shiny silvery ones do! I think that having the larger, black radiating surface really does do a LOT for helping keep the tube temps down.

The rig is only a little off in dial calibration...how can you really tell where you are with these bandspread rigs, anyway? ;-) ... and seems real sensitive

at least up around 18mc when I listened to some SWBC there the other morning, so, I'll align it later when I get a few more rigs together and do them all at once.

The tuning mechanism of this rig feels great! I cleaned out all the grease in the bearings and in the capacitors and re-lubed using a spray lube that thickens when the solvent evaporates called RIP-3. This is probably the same lube as LPS-3 and is a good viscosity for many small devices. It penetrated into the bearings and then thickened giving great "feel" without that underdamped feeling a lot of thinner lubes can give.

I have also used this to squirt into controls, like the sensitivity control, that are noisy or hard to turn, and has done some great things...the sensitivity control would not move when I got the radio...after a little of the RIP-3 worked in to the unit (I had to pry the back cover open while I stuck the extension tube into the control) the control works like magic! The solvent thinned lube really works into areas that lube may have thickened in and relubes that area. It also gives pots that good damped feeling that a lot of cleaners remove. Just my observations and one that an old time radio tech said he had used for years.

That's about it for now, thanks and have fun with all your projects!

Rick Blank, KI5SL
2223 Blanco Road
San Antonio, Texas 78212

rblank@txdirect.net
KI5SL@K3WGF.STX.USA.NOAM
AMSAT NA#26195

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: dgibbs@rational.com
Subject: Timonium, MD hamfest Report - 3/30/96
Message-ID: <Chameleon.960331210954.dgibbs@>

Greetings all,

I attended the Timonium, MD hamfest on Saturday, 3/30/96. This hamfest is actually a two-day fest, on both Saturday and Sunday, but I only attended Saturday. Marc Melucas, ex-boatanchors subscriber, KP0JPQ, was with me.

Timonium is a couple miles north of Baltimore, MD, and about 30

miles North of Washington, DC. This fest has grown in recent years, and now, I would say it is second only to Gaithersburg as the largest hamfest in the Washington, DC/Baltimore area.

Attendance at this fest was impressive. I arrived at 7:40 AM (Opening time for non-tailgaters was 8:00) and there was already a traffic jam to get into the place (It was held at Timonium Fairgrounds). In addition, they were already holding up signs stating that the tailgating area was full.

Anyway, here is a list of what Marc and I recalled from memory seeing.

Collins -----

R390A, no meters or covers.....	\$150
R390A, with meters and covers.....	\$400
32V2, already sold prior to 8AM.....	\$ 75
KWM2s, at least two, I think they were.....	\$800
75S1, there were quite a few of these, don't recall the prices	

National -----

HRO-50, with original coil box and 4 coils.....	\$165
NC-303, nice looking.....	\$325
RAS, with pwr supply, speaker, 7 coils, coil box Mint!.....	\$375
NC-200, with speaker.....	\$200
NC-183 (non-D model) with speaker.....	\$250
HRO-5, with doghouse pwr supply and 4 coils.....	\$225

Hallicrafters -----

HT-32.....	\$unknown
HT-37.....	\$unknown
SX-62.....	\$unknown
SX-122 unworking, without cabinet.....	\$ 65

Hammarlund -----

SP-600JX-6, looked nice, no bottom cover.....	\$300
HQ-180, with matching speaker, but no clock.....	\$350
HQ-120, sold quickly.....	\$200

Misc. -----

TV-2 tube tester.....	\$350
-----------------------	-------

RME-6900, with matching speaker.....\$225
R-366 receiver, nice condition.....\$250
AR-77, (RCA) with matching speaker, nice condition.....\$175
Nems-Clarke 1670 tube VHF receiver.....\$100

Also, there was lots of Watkins-Johnson equipment. Marc left with a Watkins-Johnson 373A2 HF receiver for \$150. There were also two WJ 8716A receivers for \$2500. Also, lots of Drake, too numerous to mention, and also a Viking I and Viking II.

Also, LOTS of tube vendors. One group in particular was selling NOS 5749Ws with 1986 date codes. They were selling them in CASES of 100 for \$50.00! They told me they had 42,000 of these. I have seen these people at all local area hamfests, so the Washington DC area is going to be drowning in 5749Ws for years to come!

There truly was something for everyone at this fest. It was quite huge, with three LARGE buildings full of vendors and tailgaters, plus a very large outdoor tailgating area.

Hopefully, others on the boatanchors list that attended the fest will add to what I've listed here; the place was so large it was difficult to see everything!

Dennis

Name: Dennis Gibbs
E-mail: dgibbs@rational.com
From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: w7ni@teleport.com (Stan Griffiths)
Subject: Re: tubes
Message-ID: <199603312228.0AA25702@desiree.teleport.com>

>Hello Stan:

>

>Question; why do scopes have some tubes specially labeled by the scope
>maker? Are they matched pairs?

Generally, yes. At least they are "checked" tubes and sometimes they are single tubes and not actually pairs.

Any tubes in Tek instruments that have the "157" prefix in the Tek part number are checked tubes. "154" prefixes are raw tubes. "Checked" can mean many things: matched and balanced, aged, checked for grid current, checked for microphonics, etc. Somewhere (I don't know where) it is written down

exactly what each "157" number is checked for. If I ever find out, I will publish it in a future book. Obviously you can't buy checked and matched tube from Tektronix anymore and it would be helpful to know how to check your own.

Stan w7ni@teleport.com

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: Nina West <ninaw@u.washington.edu>
Subject: Variac Marked "350 cycles min"
Message-ID: <Pine.A32.3.92a.960330220323.13464B-100000@homer29.u.washington.edu>

Picked up what I thought was a bargain variac from Boeing Surplus today. It was in a small box marked test aid and is smaller than most I have seen and is marked:

120V-6A-350 cycles min
VARIAC type M5

Is this unit for use on 400 cycles aircraft power? What will happen when I try it on 60 cycle power? I would appreciate some instruction on this as well as general info about how inductors, transformers, etc, are set up for different power supply frequencies. I have heard that the 400 cycle aircraft power results in lighter equipment. And what is this I hear about 25 cycle power in the Panama Canal Zone? Would transformers for this power be twice as heavy as for 50 or 60 cycle power?
Thanks for your help

Fred Powell
c/o
ninaw@u.washington.edu

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: bill@texan.frco.com (William Hawkins)
Subject: Re: Variac Marked "350 cycles min"
Message-ID: <9603310703.AA06018@texan.frco.com>

Iron core things like transformers and variacs get into serious trouble when the magnetic circuit saturates. Since the magnetic field can't change anymore, the inductance drops a lot, and you are left with the resistance of the copper wire across the line. The winding probably can't dissipate enough heat to prevent it from melting. Below saturation, the magnetic field increases

toward saturation proportional to the voltage across the winding times the time, or $V \times T$.

So, if the variac is rated at 120 VAC at 350 cps, the $V \times T$ value is proportional to 120/350. If you want to use it on 60 cps, the ratio must be the same, or about 20/60. You can use the variac with 20 VAC, 60 Hz on the primary, at 6 amps. The current is a function of the wire and brush sizes, not line frequency.

You get more $V \times T$ capacity with more iron, so 25 Hz transformers are bigger than 60 Hz, which are bigger than 400 Hz, for the same voltage. I'd have to find a book to get real numbers for the size ratios.

Bill Hawkins

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: aevang@cris.com (alevangelista)
Subject: Re: Variac Marked "350 cycles min"
Message-ID: <199603311255.HAA04051@franklin-fddi.cris.com>

Fred, Took a walk through Boeing Surplus during a visit to Seattle in 89 - cool place - especially if you are in to used tooling.

I believe that the variac which you describe should not be used with 60 cycle power as it will present too low a 'load resistance' at this frequency - result: heat, smoke, circuit breaker trip, aggravation, hostility toward innocent house pets, etc. There is probably an expert among us who will be able to tell us (from a theoretical standpoint) exactly how long this sequence of events should take.

The equivalent load resistance (inductive reactance) is directly proportional to the frequency, so what appears to be an acceptable load at 400 cycles is something of a 'short' at 60 cycles. Adding iron to the core increases the reactance - hence a 60 cycle variac (or inductor of any sort) will be more massive than one designed to present an equivalent load at 400 cycles.

Maybe someone can tell us whether this is the reason why aircraft systems are 400 cycle (I believe that some aircraft systems are also 800 cycle).. Sounds like a 'chicken and egg' question. Were 400/800 cycle aircraft power systems designed for this frequency because there was a lot of surplus 400/800 cycle aircraft surplus on the market in the 30s? ;)

-Al Evangelista (KB8WYN) aevang@cris.com

>Picked up what I thought was a bargain variac ... marked:
>120V-6A-350 cycles min
>VARIAC type M5
>... What will happen when
>I try it on 60 cycle power? I would appreciate some instruction on this
>as well as general info about how inductors, transformers, etc, are set up
>for different power supply frequencies. I have heard that the 400
>cycle aircraft power results in lighter equipment....

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: "Richard L. Duell" <rduell@iac.net>
Subject: Re: Variac Marked "350 cycles min"
Message-ID: <199603311320.IAA18401@great-miami.iac.net>

At 00:18 3/31/96 -0600, Fred Powell wrote:
>Picked up what I thought was a bargain variac from Boeing Surplus today.
>It was in a small box marked test aid and is smaller than most I have
>seen and is marked:
>
>120V-6A-350 cycles min
>VARIAC type M5
>
>Is this unit for use on 400 cycles aircraft power? What will happen when
>I try it on 60 cycle power?

My first, and last experience with 400 cycle gear, occurred when I was about 13 and acquired a power supply that I thought was going to provide big time juice for the transmitter I had planned.

I rigged up a power cord, plugged it in, turn on the switch and was greeted with a basso profundo hum that lasted for about two seconds. Then the room went dark.

After changing the fuse, I called my engineer friend at the local radio station and was told the facts of life regarding 400 cycle equipment. It's lighter because you don't have to use as much steel in the transformer cores. Won't work on 60 cycles (at least not at the rated input voltage). Since a Variac is a transformer...

I'm sure you'll get more learned responses from some of the PEs in the group, but my bottom line is...I don't mess with it.

73, Rich - W5VDU

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: "Benjamin D. Hall" <bdhall@ghgcorp.com>
Subject: Re: Variac Marked "350 cycles min"
Message-ID: <315E8DC4.79C7@ghgcorp.com>

alevangelista wrote:

>
> Maybe someone can tell us whether this is the reason why aircraft systems
> are 400 cycle (I believe that some aircraft systems are also 800 cycle)..
> Sounds like a 'chicken and egg' question. Were 400/800 cycle aircraft
> power systems designed for this frequency because there was a lot of
> surplus 400/800 cycle aircraft surplus on the market in the 30s? ;)

>From the earlier post, I think airplanes use 400Hz becuase the transformers
can be lighter than their 60Hz comrades while supplying the same power.
Anyone know for sure?

I work in the shuttle program, and I was looking at some shuttle Electrical
Power System drawings and the shuttle uses 117 VAC, 400Hz. In fact, all the
instrument lighting is AC and uses probably about 6 or 7 117 VAC 400 Hz to 6
VAC transformers to power the 6 VAC bulbs from 117 VAC. I was told this was
done becuase it is easier to do the panel dimming with AC and triacs than to
do the same with DC. Wierd.

73,
Ben
--

=====
+ Benjamin D. Hall, Houston Texas +
+ BDHall@GHGCorp.com BHall@GP802.JSC.NASA.gov +
=====

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: launerb@crl.com (William H. Launer)
Subject: Re: Variac Marked "350 cycles min"
Message-ID: <v01520d00ad8478d23834@[192.0.2.1]>

Al Evangelista wrote:
>Maybe someone can tell us whether this is the reason why aircraft systems
>are 400 cycle (I believe that some aircraft systems are also 800 cycle)..
>Sounds like a 'chicken and egg' question. Were 400/800 cycle aircraft
>power systems designed for this frequency because there was a lot of
>surplus 400/800 cycle aircraft surplus on the market in the 30s? ;)

I participated in some NASA funded "pre-rfp" Space Shuttle studies at
McDonnell Douglas. One of our tasks was to define an Electrical Power

Subsystem for the Shuttle vehicle. Because of weight constraints, we considered high voltage DC, as well as 400 cycle (and higher) AC.

During the study, I did some research on the evolution of modern aircraft power systems. I never uncovered why 400 cycles was selected instead of some other frequency. It probably was as simple as the number of poles on an alternator, and the speed that it could be driven. We can only assume that, once one system was installed in a production aircraft, 400 cycles became a "standard" (why reinvent the wheel?). Up through WWII, most aircraft used low-voltage DC generators and batteries for power. That's why most WWII surplus aircraft electronic equipment was powered by 12 or 24 volt dynamotors. Avionics at that time was pretty much limited to communications, some navigation aids, and, in some instances, radar equipment.

As technology developed, the need for more electrical power became larger. Weight has always been a critical factor in aircraft design. Especially in larger aircraft, the power distribution system (wires, switchgear, etc) is an important factor. To distribute the higher power levels required, the logical step was to raise the voltage. The British built several flying boats with high voltage DC systems (HVDC), while the Americans concentrated on AC systems. There were several problems inherent with HVDC at the time; the availability of practical switchgear (high voltage DC relays), and power conversion equipment (DC-DC conversion was limited to dynamotors and motor generators). In a high-voltage, 400 cycle AC system, the old DC switchgear designs could be used (contact arcing quenches each half cycle, so no need for multiple-break contacts), and power conversion could be provided with lighter weight transformer-rectifier equipment (little, if any, avionics equipment ever operates from the distributed power without conversion), with no moving parts.

HVDC power systems are still being pursued; recent revisions of MIL-STD 704 define characteristics of 120 VDC aircraft power systems. Space Station Freedom (now defunct) was to use an HVDC distribution system, because solar array/battery systems are inherently DC systems; solid-state switches and DC-DC conversion equipment have solved a lot of the old HVDC problems. I'm not sure what the International Space Station is being designed for.

Sorry if I overused the bandwidth, but I thought it might answer some of the questions.

73, Bill wb0cld
launerb@crl.com

Bill Launer

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qrp-l #279 qrp arco #3551

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Sandy Blaize <70401.134@compuserve.com>
Subject: Re: Variac Marked "350 cycles min"
Message-ID: <960331201958_70401.134_IHD53-2@CompuServe.COM>

Yep! The reason for using 400 Hz. is primarily to save weight. Most of the aircraft systems that use any significant amount of power are also 3-phase! It seems that nearly every "tinkerer" back in the 50's tried using those nice 400 Hz.

power transformers on 60 Hz! Lotsa blown fuses and smoked wires!

There are a lot of maritime radar systems that use 1000 Hz. for power. This also doubles as the "PRF" frequency as well, used 'as-is' or doubled to 2000

Hz. The resultant transformers are much tinier than they would be with a 60 hz. system. The voltages are generated by a "static" inverter/chopper or a motor/alternator set usually.

What's REALLY FUN, is working on an aircraft in the hot sun and getting belted with the 115v/400 HZ! Besides the usual discomforts of the shock, you can

hear it as well! Ugh! I'm still smarting from that everytime I think about it, although

its been over 40 years ago!

73,

Sandy W5TVW

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: Variac Marked "350 cycles min"
Message-ID: <Pine.ULT.3.91.960331143540.14174A-1000000@admin.aurora.edu>

Back in the '60's in the Army, I was at a Nike missile site. The radar equipment was all 400Hz powered and was in 2 semi-trailers. While the tactical gear itself was probably smaller because of the 400 Hz power, it took two 60KW Cummins diesel powered generators(60 Hz) and two 15KW rotary 400 Hz converters to run the stuff. This equipment took up the same space as both trailers!

One interesting thing happened - one day we were rearranging benches and cabinets in the interconnecting mainrenance building between the vans.

The wall clock was moved to a new spot and plugged in. However it really ran fast - it got plugged into a 400 Hz outlet.

This radar system was all BA. Hundreds of tubes. Our biggest fear was losing power because we knew that when power came back on we would have to replace many tubes as the filaments would open.

E-mail broehrig@admin.aurora.edu

73 de Bob, K9EUI

From boatanchors@theporch.com Sun Mar 31 10:24:23 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Weatherford Hamfest
Message-ID: <199603311333.HAA21275@dlep1.itg.ti.com>

Greetings;

Disappointing hamfest. Only a few BoatAnchors were there, these being sold by resellers.

There was a TR-4 with supply and spare TR-4CW for \$375, both in good condition, but apparently only one supply. This was the only thing which seemed to be sold by an individual.

SB-610 with coils sold before I could locate the seller (drats)
The reseller with the old stuff had two 2NT's, 2-B(?), SX-111 with speaker (\$150), DX-160 and a few other goodies.

Only other thing of marginal interest was old Yaesu FRdx-401 and FLdx-401(?). The seller "didn't know what they were worth". He had bought them from an estate along with other stuff and was entertaining offers.

Picked up a dozen useful metal tubes for \$0.50 each, including three 6F6's. All checked good except for a 6V6, so it wasn't a total waste of time.

Regards,

Bill Sorsby, N5BU

bill.sorsby@dlep1.itg.ti.com

From boatanchors@theporch.com Mon Apr 1 01:23:46 1996
From: davidh@getnet.com (Dave Hollander)
Subject: WTB: National HRK Knob
Message-ID: <v01510100ad850de30c2d@[10.0.2.15]>

Looking for a National HRK knob to complete my NC-100A.

Anybody have one they want to part with??

Dave N7RK

Dave N7RK - Webmaster CADXA
Phoenix, Arizona *DXCC Honor Roll* *WAZ#23 - 75 Meter SSB*

ex-N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK

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